

August 26, 2020

Sent via Electronic Mail & FedEx

Mr. Jonathan Witt Sector Policies and Programs Division (E143–05) Office of Air Quality Planning and Standards United States Environmental Protection Agency Research Triangle Park, NC 27711 (919) 541–5645 witt.jon@epa.gov.

Subject:

Updated Estimated Ethylene Oxide Emissions Boston Scientific Corporation Sterilization Facility

Coventry, Rhode Island

Dear Mr. Witt:

The purpose of this letter is to provide the United States Environmental Protection Agency ("EPA") with an updated estimate of ethylene oxide (EO) emissions for calendar years 2014 through 2018 for the Boston Scientific Corporation (Boston Scientific) located at 8 Industrial Drive in Coventry, Rhode Island ("Facility"). On February 13, 2020, Boston Scientific submitted emissions estimates for calendar years 2014 through 2017 in connection with EPA's advanced notice of proposed rulemaking (ANPRM) regarding National Emission Standards for Hazardous Air Pollutants: Ethylene Oxide Commercial Sterilization and Fumigation Operations, 84 Fed. Reg. 67889 (December 12, 2019).

In that submission, Boston Scientific provided updated fugitive emissions estimates for calendar years 2014 through 2017 by applying a fugitive emissions factor based on 2018 emissions data. Boston Scientific is now updating its stack emissions estimates to (1) correct certain errors in the application of the removal efficiency percentage to the Facility's EO usage to derive the 2014 through 2017 stack emissions estimates and (2) provide EPA with an updated estimate for 2018 stack emissions using the same methodology it used for the 2014-2017 stack estimates. Table 1 provides revised emissions estimates for 2014-2018. For EPA's reference, Boston Scientific also is including as Table 2 the emissions estimates it provided in the February 13, 2020 letter.

<sup>&</sup>lt;sup>1</sup> In 2018, Boston Scientific conducted a review of potential sources of EO from its processes. As part of that review, the company developed a method to estimate its EO fugitive emissions from its heating, ventilation and air conditioning (HVAC) system. The Boston Scientific annual emission report for calendar year 2018 was prepared using that updated emission estimating procedure as applied to several hundred thousand discrete measurements of EO collected in 15-minute increments throughout the year. The information that was available to estimate 2018 calendar year fugitive emissions is not available for calendar years 2014 through 2017. Therefore, at the direction of the Rhode Island Department of Environmental Management, Boston Scientific derived fugitive emission estimates for calendar years 2014 through 2017 by applying the 2018 data proportionally and creating fugitive emissions factor to apply to prior calendar years.

Table 1, Revised estimate of stack and fugitive EO emissions at the Facility -- Calendar years 2014-2018

	2014		2015		2016		2017		2018	
	Original Report	Updated Report								
Total stack (lbs)	9.04	8.91	1.65	9.72	1.73	10.29	1.89	11.97	279.3	12.91
Fugitives (lbs)	0.00	525.00	0.00	572.40	0.00	603.60	0.00	659.00	438.1	684.00
Total Emissions (lbs)	9.04	533.91	1.65	582.12	1.73	613.89	1.89	670.97	717.4	696.91

All updated emission estimates are below the Facility's permitted limit of 1,298 pounds per year. *See* Minor Source Permit Approval Nos. 2114 and 2131-2134 issued by RIDEM to Boston Scientific on October 17, 2011.

Table 2, February 13, 2020 estimate of stack and fugitive EO emissions at the Facility -- Calendar years 2014-2017

	2014		2015		2016		2017	
	Original	Updated	Original	Updated	Original	Updated	Original	Updated
	Report	Estimate	Report	Estimate	Report	Estimate	Report	Estimate
Ethylene Oxide Used (lbs)	221,600		241,637		254,800		278,200	
Stack Emissions (lbs)	9.04	7.00	1.65	7.60	1.73	7.80	1.89	8.30
Fugitive Emissions (lbs)	0.00	525.00	0.00	572.40	0.00	603.60	0.00	659.00
Total Emissions (lbs)	9.04	532.00	1.65	580.00	1.73	611.40	1.89	667.30

If you have any questions, please do not hesitate to contact me directly by phone at (401) 214-7998 or email at Mark.Pace-Floridia@BSCI.com.

Sincerely,

Mark Pace-Floridia

**Director Global Sterilization Operations** 

Coventry, RI

Copy: Karen Slattery, Rhode Island Department of Environmental Management

Ref: Dep:

Date: 27Aug20 Wgt: 0.15 LBS

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